



Substitute Specification

SPECIFICATION

5 SWIRL CHAMBER USED IN ASSOCIATION WITH A
COMBUSTION CHAMBER FOR DIESEL ENGINES

TECHNICAL FIELD

OK
to enter
sub spec.
2 Sol's
11/21/05

10 [0001] The present invention relates generally to a combustion
chamber for diesel engines, and more particularly, to improvements
upon a swirl chamber used in association with a combustion
chamber for diesel engines.

BACKGROUND ART

15 [0002] In general, diesel engines are notorious as a major source
of environmental contaminants such as NO_x and fumes. However,
no effective measures have been accomplished for solving those
problems. It is known that these problems are due to the
incomplete combustion in the engine occurring because of
inadequate mixing of air and fuel. To solve these problems,
20 swirl-aided combustion systems are commonly used. Here is one
example for tackling this problem, which is disclosed in Japanese
Patent Laid-open Application No. 07-97924. Referring to Fig. 10, the
known combustion chamber fitted with a swirl chamber will be
described:

25 [0003] In Figs. 10A and 10B the right-hand side (toward the